

## § 23.1201

## 14 CFR Ch. I (1–1–08 Edition)

### § 23.1201 Fire extinguishing systems materials.

For commuter category airplanes, the following apply:

- (a) No material in any fire extinguishing system may react chemically with any extinguishing agent so as to create a hazard.
- (b) Each system component in an engine compartment must be fireproof.

[Amdt. 23–34, 52 FR 1833, Jan. 15, 1987; 52 FR 7262, Mar. 9, 1987]

### § 23.1203 Fire detector system.

- (a) There must be means that ensure the prompt detection of a fire in—
  - (1) An engine compartment of—
    - (i) Multiengine turbine powered airplanes;
    - (ii) Multiengine reciprocating engine powered airplanes incorporating turbochargers;
    - (iii) Airplanes with engine(s) located where they are not readily visible from the cockpit; and
    - (iv) All commuter category airplanes.
  - (2) The auxiliary power unit compartment of any airplane incorporating an auxiliary power unit.
- (b) Each fire detector must be constructed and installed to withstand the vibration, inertia, and other loads to which it may be subjected in operation.
- (c) No fire detector may be affected by any oil, water, other fluids, or fumes that might be present.
- (d) There must be means to allow the crew to check, in flight, the functioning of each fire detector electric circuit.
- (e) Wiring and other components of each fire detector system in a designated fire zone must be at least fire resistant.

[Amdt. 23–18, 42 FR 15042, Mar. 17, 1977, as amended by Amdt. 23–34, 52 FR 1833, Jan. 15, 1987; Amdt. 23–43, 58 FR 18975, Apr. 9, 1993; Amdt. 23–51, 61 FR 5138, Feb. 9, 1996]

## Subpart F—Equipment

### GENERAL

### § 23.1301 Function and installation.

Each item of installed equipment must—

- (a) Be of a kind and design appropriate to its intended function.
- (b) Be labeled as to its identification, function, or operating limitations, or any applicable combination of these factors;
- (c) Be installed according to limitations specified for that equipment; and
- (d) Function properly when installed.

[Amdt. 23–20, 42 FR 36968, July 18, 1977]

### § 23.1303 Flight and navigation instruments.

The following are the minimum required flight and navigation instruments:

- (a) An airspeed indicator.
- (b) An altimeter.
- (c) A direction indicator (non-stabilized magnetic compass).
- (d) For reciprocating engine-powered airplanes of more than 6,000 pounds maximum weight and turbine engine powered airplanes, a free air temperature indicator or an air-temperature indicator which provides indications that are convertible to free-air.
- (e) A speed warning device for—
  - (1) Turbine engine powered airplanes; and
  - (2) Other airplanes for which VMO/MMO and VD/MD are established under §§ 23.335(b)(4) and 23.1505(c) if VMO/MMO is greater than 0.8 VD/MD.

The speed warning device must give effective aural warning (differing distinctively from aural warnings used for other purposes) to the pilots whenever the speed exceeds VMO plus 6 knots or MMO+0.01. The upper limit of the production tolerance for the warning device may not exceed the prescribed warning speed. The lower limit of the warning device must be set to minimize nuisance warning;

(f) When an attitude display is installed, the instrument design must not provide any means, accessible to the flightcrew, of adjusting the relative positions of the attitude reference symbol and the horizon line beyond that necessary for parallax correction.

(g) In addition, for commuter category airplanes:

- (1) If airspeed limitations vary with altitude, the airspeed indicator must have a maximum allowable airspeed indicator showing the variation of VMO with altitude.